

Claims

1. Method for transmission of information in paths of an ATM network
- 5 wherein a path setup for at least one new path in the network is initiated if the path capacity currently used for transmission of information exceeds a threshold (Fig. 14, setup threshold),
- wherein a path release for at least one path in the network is initiated if the path capacity currently used for transmission of
- 10 information is below a threshold (Fig. 14, release threshold).
2. Method according to claim 1
- characterized in that the decisions on path setups and/or path releases are made when a new call or an other new data transmission
- 15 is requested to be set up, wherein preferably for making an anticipatory decision the said capacity currently used for transmission of information includes the capacity necessary for the new call or data transmission.
- 20 3. Method according to any of the preceding claims
- characterized in that the setup threshold and/ or the currently used path capacity represents accumulated cell rates.
4. Method according to any of the preceding claims
- 25 characterized in that the thresholds and/ or the currently used path capacity represent
- the number of currently used ATM-channels in one path or in more than one path or in all paths.
- 30 5. Method according to any of the preceding claims
- characterized in that the thresholds are preset values.

6. Method according to any of the preceding claims
characterized in that the thresholds are variable values that are
administrated by the network.

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7. Method according to any of the preceding claims
characterized in that the network is an ATM-AAL2 network.

8. Method according to any of the preceding claims
10 characterized in that the setup threshold exceeds the release
threshold.

9. Method according to any of the preceding claims
characterized in that after setup of a path, ATM- channels can be
15 assigned to the path.

10. Method according to any of the preceding claims
characterized in that the path capacity currently used for trans-
mission of information is the current traffic in either one path
20 or all currently used paths.

11. Method according to any of the preceding claims
characterized in that the setup and/or release threshold repre-
sents a minimum or maximum of a distance between currently used
25 network resources and all available path resources.

12. Method according to any of the preceding claims
characterized in that a path is an ATM-VCC (ATM virtual channel
connection).

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13. Method according to any of the preceding claims
characterized in that a channel is an AAL2 channel.

5 14. Method according to any of the preceding claims
characterized in that after a setup of more than one path, a path
is respectively occupied completely with ATM- channels before
starting to occupy an other path with ATM channels.

10 15. Method according to any of the preceding claims
characterized in that a path release for at least one path in the
network is initiated only if the path capacity currently used for
transmission of information is below a threshold during at least a
15 preset period of time or if it is on the average below a thresh-
old during at least a preset period of time.

16. Device for transmission of information in paths of an ATM net-
work

-with means for storing thresholds

20 -with means for determining the path capacity currently used for
transmission of information

-with means for comparing the determined path capacity currently
used for transmission of information and at least one stored
threshold

25 -with means (Figure 10/ SVC control; access manager) that are de-
signed for initiating a path setup for at least one new path in
the network if the path capacity currently used for transmission
of information exceeds a threshold (Fig. 14, setup threshold),

30 -with means that are designed for initiating a path release for at
least one path in the network if the path capacity currently used
for transmission of information is below a threshold (Fig. 14, re-
lease threshold).

17. Device according to claim 16

characterized in that the decisions on path setups and/or path re-
leases are made when a new call or an other data transmission is
5 requested to be set up, wherein preferably the said capacity cur-
rently used for transmission of information includes the capacity
necessary for the new call or data transmission.

18. Device according to any of the preceding claims 16-17

10 characterized in that the thresholds and/ or the currently used
path capacity represent accumulated cell rates.

19. Device according to any of the preceding claims 16-18

characterized in that the thresholds and/ or the currently used
15 path capacity represent
the number of currently used ATM-channels in one path or in more
than one path or in all paths.

20. Device according to any of the preceding claims 16-19

20 characterized in that the thresholds are preset values.

21. Device according to any of the preceding claims 16-20

characterized in that the thresholds are variable values that are
administrated by the network.

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22. Device according to any of the preceding claims 16-21

characterized in that the network is an ATM-AAL2 network.

23. Device according to any of the preceding claims 16-22

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characterized in that the setup threshold for setup of at least one path is bigger the release threshold for release of at least one path.

- 5 24. Device according to any of the preceding claims 16-23
characterized in that after setup of a path, ATM- channels can be assigned to the path.

25. Device according to any of the preceding claims 16-24
10 characterized in that the path capacity currently used for transmission of information is the current traffic .

26. Device according to any of the preceding claims 16-25
characterized in that the setup and/or release threshold represents a minimum or maximum of a distance between currently used
15 network resources and all available path resources.

27. Device according to any of the preceding claims 16-26
characterized in that it or a component of it is provided at an
20 access point of an ATM network.

28. Device according to any of the preceding claims 16-27
characterized in that a path is an ATM-VCC (ATM virtual channel connection).

- 25 29. Device according to any of the preceding claims 16-28
characterized in that a channel is an AAL2 channel.

30. Device according to any of the preceding claims 16-29

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characterized in that after a setup of more than one path, a path is respectively occupied completely with ATM- channels before starting to occupy an other path with ATM channels.

5 31. Device according to any of the preceding claims 16-30

characterized in that a path release for at least one path in the network is initiated only if the path capacity currently used for transmission of information is below a threshold during at least a preset period of time or if it is on the average below a thresh-
10 old during at least a preset period of time.

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